

Diagnostic Devices and Apparatus for the Controlled  
Movement of Reagents Without Membranes

Abstract

The assay devices, assay systems and device components of this invention  
5 comprise at least two opposing surfaces disposed a capillary distance apart, at least  
one of which is capable of immobilizing at least one target ligand or a conjugate in  
an amount related to the presence or amount of target ligand in the sample from a  
fluid sample in a zone for controlled fluid movement to, through or away the zone.  
The inventive device components may be incorporated into conventional assay  
10 devices with membranes or may be used in the inventive membrane-less devices  
herein described and claimed. These components include flow control elements,  
measurement elements, time gates, elements for the elimination of pipetting steps,  
and generally, elements for the controlled flow, timing, delivery, incubation,  
separation, washing and other steps of the assay process.

15

TOP SECRET - 6333660